## Department of Engineering Education Minor: Innovation Minor For students entering under UG Catalog 2023-2024

<u>I – Introductory/Foundational Experience Required Courses (6 Credit Hours)</u>	<u>Credits</u>
*STS 2254 Innovation in Context (Core Concept 2: Discourse; Integrated Concept 10: Ethical Reasoning and 11: Intercultural and Global Awareness)	3
*ENGE 2094 Create!: Ideation for Innovation (Core Concept 6d: Design; Integrated Concept 11: Intercultural and Global Awareness)	3
Section I – Total # of Credits	6
<u>II – Mid-level Experience Required Course Electives (9 Credit Hours)</u>	<u>Credits</u>
*ACIS 1004 Accounting Foundations (Core Concept: 5f, Integrative Concept; 10)	3
*AHRM 1014 Introduction to Design for Consumers (Core Concept: 6d, Integrative Concept: 11)	3
*AHRM 2014 Design for Consumers Studio (Pre: AHRM 1014) (Core Concept: 6d, Integrative Concept: 11)	3
*COMM 2004 Public Speaking (Core Concept: 1a, Integrative Concept 10)	3
*CS 1014 Introduction to Computational Thinking (Core Concept 5f, Integrative Concept 10)	3
*ENGE 1644 Global STEM Practice: Leadership and Culture (Pre: 1215) (Core Concept 3, Integrative Concept: 11)	3
*ENGE 2524 Exploring Service Learning Through STEAM/STEM Educational Outreach (Core Concept 3,7, Integrative Concept: 11)	3
*ENGE 4104 Applied Explorations in Innovation (Core Concept 5, 6, Integrative Concept 10,11)	3
*ENGE 4735 Interdisciplinary Design Capstone (Core Concept 1a, Integrative Concept 10)	3
*ENGL 1654 Introduction to Science Fiction and Fantasy (Core Concept: 2, Integrative Concept 11)	3
*ENGL 3764 Technical Writing (Pre: Junior Standing) (Core Concept: 1a, Integrative Concept: 10)	3
ENGL 3774 Business Writing (Pre: Junior Standing)	3
ENGL 3814 Creating User Documentation (Pre: 1106 or 1204H or COMM 1016)	3
ENGL 3824 Designing Documents for Print (Pre: 1106 or 1204H or COMM 1016)	3
ENGL 3834 Intercultural Issues in Professional Writing (Pre: 1106 or 1204H or COMM 1016)	3
*ENGL 3844 Writing and Digital Media (Pre: ENGL 1106 or 1204H or COMM 1016)	3
ENGL 4804 Grant Proposals and Reports (Pre: 1106 or 1204H or COMM 1016)	3

ENGL 4814 Developing Online Content (Pre: 1106 or 1204H or COMM 1016)	APPROVED 3 University Registrar
ENGL 4824 Science Writing (Pre: 1106 or 1204H or COMM 1016, Senior Standing)	3
*HIST 2715, 2716 History of Technology (cross-listed with STS 2715, 2716) (Core Concept: 3, Integrative Concept: 11)	3
ISE 4004 Theory of Organization	3
ISE 4015 Management Systems Theory, Applications, and Design	3
ISE 4304 Global Issues in Industrial Management	3
STS 2054 Engineering Cultures (cross-listed with HIST 2054)	3
*STS 2154 Humanities, Technology and the Life Sciences (Core Concept: 2, Integrative Concept 10)	3
STS 2354 Humanities, Technology and the Physical Sciences	3
*STS 3284 Technology and Disability (Core Concept: 6d, Integrative Concept 10)	3
*STS 3334 Energy and Society (Core Concept: 3, Integrative Concept 11)	3
Section II – Total # of Credits	9
<u>III – Capstone Experience Required Course (3 Credit Hours)</u>	<u>Credits</u>
*MGT/ENGE/IDS 4094 The Startup Class: Commercialization of Innovation (Core Concept 3: Social Science; Integrated Concept 10: Ethical Reasoning)	3
Section III – Total # of Credits	3
Minor Total # of Credits	18

\*Courses indicated with an asterisk are Pathways General Education Courses. If completing this minor to satisfy Pathways General Education requirements, please reference the core and/or integrated concept(s) satisfied by the course during the selection of courses for the completion of this minor.

## Key to Pathways Learning Core Outcomes:

- 1f = Foundational Discourse
- 1a = Advanced/ Applied Discourse
- 2 = Critical Thinking in the Humanities
- 3 = Reasoning in the Social Sciences
- 4 = Reasoning in the Natural Sciences
- 5f = Foundational Quantitative and Computational Thinking
- 5a = Advanced/Applied Quantitative and Computational Thinking
- 6 = Critique and Practice in Design and the Arts
- 7 = Critical Analysis of Equity and Identity in the United States

## NOTES:

Minimum GPA: A minimum minor GPA of 2.0 in each course taken to fulfill the minor is required.

**GRADUATION REQUIREMENT:** Students must achieve a grade of C or higher in all courses taken for the minor (ENGE 2094, STS 2254, ENGE 4094, and any three courses taken from (ACIS 1004, AHRM 1014, 2014, CS 1014, COMM 2004, ENGE 1644, 2524, 4104, 4735, ENGL 1654,3764,3774,3824,3834,3844, 4804,4814,4824, HIST 2715 or STS 2715, HIST 2716 or STS 2716, ISE 4004, 4015,4304, STS 2054,2154,2354, 3284, 3334)

**Prerequisite Statement:** Some courses listed on this checksheet have prerequisites, please consult the University Course Catalog, or check with your advisor.

**Electives**: A minimum of 3 credits of electives must be at the 3000-4000 level. Rev. 10/27/2020